AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF CLAIMS:

Claims 1-12 : (Canceled)

Claim 13 : (New) A method of transmitting information from a start node to a target node in a wavelength division multiplex optical communications network having a plurality of nodes, each of which includes a wavelength selective optical cross-connect having a plurality of switching matrices, each switching matrix being provided for switching wavelength channels of a specific wavelength, the method comprising the steps of: applying at least two wavelength channels having different wavelengths but which are modulated with the same information to an input of the switching matrices of the start node cross-connect provided for these wavelengths; transmitting the at least two wavelength channels to the target node cross-connect; and dropping the at least two wavelength channels at outputs of different switching matrices of the cross-connect provided for the different wavelengths.

Claim 14 : (New) The method according to claim 13, and the step of routing the at least two wavelength channels via different intermediate cross-connects between the start node and target node cross-connects.

Claim 15 : (New) The method according to claim 14, and the step of keeping the wavelengths of the at least two wavelength channels during transmission between the start node and target node cross-connects.

Claim 16 : (New) The method according to claim 14, and the step of modifying the wavelength of at least one of the wavelength channels at an intermediate node cross-connect.

Claim 17 : (New) The method according to claim 16, and the step of jointly defining routing paths of the at least two wavelength channels by a central network controller operative for choosing the different wavelengths for transmission between a last intermediate node cross-connect and the target node cross-connect.

Claim 18 : (New) The method according to claim 16, and the step of dividing the wavelengths transmissible in the optical network into at least two groups, and the step of selecting the wavelengths of the at least two wavelength channels from different groups, each wavelength modification of one of the channels at an intermediate node cross-connect occurring between wavelengths of a same group.

Claim 19 : (New) A node for a wavelength division multiplex optical communications network, comprising: a wavelength selective optical cross-connect having a plurality of inputs for optical wavelength multiplex lines; a plurality of switching matrices each switching matrix being operative for switching wavelength channels of specific wavelength; a plurality of add ports for adding data traffic; and a signal divider for distributing an information signal to be added to at least two of the add ports of the switching matrices provided for different wavelengths.

Claim 20 : (New) The node according to claim 19, in that the signal divider is an optical signal divider.

Claim 21 : (New) The node according to claim 19, in that the signal divider is an electrical signal divider, and in that an opto-electrical transducer is provided between the signal divider and the add data traffic input ports connected to the signal divider.

Claim 22 : (New) A node for a wavelength division multiplex optical communications network, comprising: a wavelength selective optical cross-connect having a plurality of ports for optical wavelength multiplex lines; a plurality of switching matrices each switching matrix being operative for switching wavelength channels having a specific wavelength; a plurality of drop ports for dropping data traffic; and a selector for selecting an information signal to be dropped at the node among drop data traffic output ports of the switching matrices provided for different wavelengths.

Claim 23 : (New) The node according to claim 22, in that the selector is an optical switch.

Claim 24 : (New) The node according to claim 22, in that the selector is an electrical switch, and an opto-electrical transducer provided between the switch and the output ports.